

WHAT IS CLAIMED IS:

- 1 1. A system for binding sheets into bound text bodies having respective
2 spines exposed for adhesive application and characterized by multiple length dimensions
3 and multiple thickness dimensions, the system comprising:
4 an adhesive dispenser configured to dispense across the thickness dimension of a
5 text body spine solid sheet adhesive having one of multiple effective widths sized to
6 correspond substantially to the length dimension of the text body spine.
- 1 2. The system of claim 1, wherein the adhesive dispenser is configured to
2 dispense multiple segments of solid sheet adhesive along the length dimension of the text
3 body spine.
- 1 3. The system of claim 2, wherein the adhesive dispenser is configured to
2 dispense solid sheet adhesive segments of different widths.
- 1 4. The system of claim 2, wherein the adhesive dispenser is configured to
2 dispense solid sheet adhesive segments of the same width.
- 1 5. The system of claim 2, wherein the adhesive dispenser is configured to
2 dispense at least one solid sheet adhesive segment independently of the other solid sheet
3 adhesive segments.
- 1 6. The system of claim 5, wherein the adhesive dispenser comprises a roller
2 system for dispensing the multiple segments of solid sheet adhesive.
- 1 7. The system of claim 6, wherein the roller system comprises a drive shaft
2 supporting multiple drive rollers.
- 1 8. The system of claim 7, wherein the adhesive dispenser comprises a motor
2 for driving the drive shaft, and a clutch disposed between a pair of drive rollers enables
3 one or both drive rollers of the drive roller pair to be driven selectively by the motor.
- 1 9. The system of claim 2, further comprising an adhesive quantity
2 interrogator configured to obtain indications of the length of each solid sheet adhesive
3 segment remaining in a plug-in cartridge housing.

1 10. The system of claim 9, further comprising a controller configured to
2 transmit a warning message when any of the solid sheet adhesive segments is nearly
3 spent.

1 11. The system of claim 2, wherein the adhesive dispenser is configured to
2 dispense multiple segments of solid sheet adhesive along the length dimension of the text
3 body spine simultaneously.

1 12. The system of claim 2, wherein the adhesive dispenser is configured to
2 dispense multiple segments of solid sheet adhesive along the length dimension of the text
3 body spine sequentially.

1 13. The system of claim 12, wherein the adhesive dispenser is configured to
2 position a plug-in cartridge housing containing a roll of solid sheet adhesive at multiple
3 locations along the length dimension of the text body spine.

1 14. The system of claim 1, wherein the adhesive dispenser comprises a width
2 cutter for cutting solid sheet adhesive to an effective width substantially corresponding to
3 the length dimension of the text body spine.

1 15. The system of claim 14, wherein the adhesive dispenser further comprises
2 a length cutter for cutting the solid sheet adhesive to a length at least as large as the
3 thickness dimension of the text body spine.

1 16. The system of claim 15, wherein the adhesive dispenser is configured to
2 advance the solid sheet adhesive beyond the location cut by the width cutter, and to cut
3 across the solid sheet adhesive with the length cutter to prepare a clean leading edge for a
4 subsequent sheet binding.

1 17. The system of claim 14, wherein the adhesive dispenser comprises a waste
2 reservoir configured to store excess solid sheet adhesive cut by the width cutter.

1 18. A method of binding sheets into bound text bodies having respective
2 spines exposed for adhesive application and characterized by multiple length dimensions
3 and multiple thickness dimensions, the method comprising:

4 dispensing across the thickness dimension of a text body spine solid sheet
5 adhesive having one of multiple effective widths sized to correspond substantially to the
6 length dimension of the text body spine.

1 19. The method of claim 17, wherein multiple segments of solid sheet
2 adhesive are dispensed along the length dimension of the text body spine.

1 20. The method of claim 17, wherein solid sheet adhesive is cut to an effective
2 width substantially corresponding to the length dimension of the text body spine.